## **Key Questions**

1. Are the 10 C, 18 C and 20 C not to exceed temperature standards reasonable as currently required to protect salmonids?

2. What is the natural temperature at which fish can thrive and do our standards truly reflect them?

3. Are the models adequate to describe both the problem and the solution?

## WA Water Quality Standards

Columbia Main Stem from Coast to OR/WA Border:

"Temperature shall not exceed 20 C (68 F) due to human activities. When natural conditions exceed 20 C (68 F) no temperature increases will be allowed which will raise the receiving water temperature by greater than 0.3 C (0.5 F) nor shall such temperature increases at any time exceed 0.3 (0.5 F) due to a single source or 1.1 C (2.0 F) due to all such activities combined."

## OR Water Quality Standards

...no measurable surface water temperature increase resulting from anthropogenic activities is allowed: ...

in the Columbia River or its associated sloughs and channels from the mouth to river mile 309 when surface waters exceed 68 F (20.0 C).

## Water Quality Standards

The WQS for this TMDL are the natural temperatures of the Columbia and Snake main stems plus small incremental increases due to human activity.



